



NEWSLETTER OF THE LONDON CHAPTER
ONTARIO ARCHAEOLOGICAL SOCIETY



FEBRUARY, 1985

85-2

MEMBER'S NIGHT

This month's meeting will be our annual opportunity to learn more about fellow Chapter member activities. It should be pretty revealing too! We've been promised entertaining presentations by the likes of Jim Keron, George Connoy, and Peter Reid.

Come visit us on Thursday, February 14 - 8:00 PM - at the Museum. Let's have a hearty membership response to this special occasion!

Chapter Executive

President

Robert Pihl (225-2527)
R.R. #1, Granton

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EXECUTIVE REPORT

Not suprisingly, our 1985 Annual O.A.S. Symposium was the major topic of discussion at the executive's January 28 meeting. Rob reported that a call for papers for the two open sessions would be published in the upcoming Arch Notes issue. Contributions to the theme session Archaeology of the Lake Huron-Georgian Bay Basin will be invited from researchers in both Ontario and Michigan.

Funding options for banquet speaker expenses, promotion and general hospitality were considered in detail. Bob Mayer, our publicity committee chairman, will design and obtain quotes on a flyer, pre-registration kit, poster and other requisition materials this month. By the next meeting, enough information should be in hand to draft a symposium budget for submission to the Toronto main body.

Brief discussions concerning members' night speakers, membership name tags for the upcoming meeting and collection of the returned bus trip questionnaires rounded out the evening's business.

SOCIAL REPORT

Over twenty bus trip questionnaires have been returned to date and fully 86% of the respondents expressed a definite interest in participating! Virtually all opted for a three day tour on the May 24th long weekend, although one person mentioned the possibility of inclement weather in northern Ontario at this time. The rock art theme proved popular, with further suggestions for trips to Bon Echo Lake and the Peterborough petroglyphs. J. Hunter suggested a tour of museum collections and provided a tentative agenda for an Historic Huronia trip. Sounds like its time to firm up the tour program and arrange the transportation!

Membership interest in Chapter field activities has encouraged the organization of a 1985 project. Plans are underway for an excavation at an endangered late Middle Woodland camp along the Lake Erie shore. Those interested in participating are requested to contact president Rob Phil at the upcoming meeting or by calling him at 225-2527.

Thursday Night Labs

Membership response has been excellent this year, as activities have ranged from artifact photography to artifact washing, ceramic vessel restoration, and individual research for report production. We have attempted to find projects suited to participant interests and have obtained great membership support in running the program. Thanks Bob M., Neal, Janie, and Bob C. (for the snacks)!

A Symposium in Osteoarchaeology
Saturday, February, 16
Kenneth Taylor Hall B135
McMaster University

The meetings will run from 8:30 A.M. to 4:30 P.M., with a reception thereafter. Admission price is \$6.00.

The following is James Hunter's latest ethnohistorical offering to our newsletter. We look forward to more submissions from our widening readership, and over the coming months plan to publish articles on such topics as conservation archaeology and osteology.

ERIE STONE: A SEVENTEENTH CENTURY IROQUOIAN MEDICINAL TRADING COMMODITY

James Hunter

Introduction

Prehistoric and historic Iroquoian exchange commodity data are normally limited to objects and material which have survived in the archaeological record. Primarily, such non-perishable materials as chert, native copper, Native ceramics as well as European goods including glass beads, ceramics, and metals have constituted the archaeological basis of information concerning 17th century Iroquoian exchange systems. Perishable commodities however have not received much attention in reconstructing Iroquoian trading networks, and the wide variety of possible materials and lack of their preservation makes this task rather difficult. Yet the "pierres Eriennes" or Erie stone is an excellent example of just such a trading commodity.

Information contained in a collection of letters written by Francois Gendron while living and working in the Huron country of New France details the presence and wide-spread exchange of a gypse-like rock called "pierres Eriennes" or Erie stone. Little is known about its source or its prehistoric and historic distribution or its potential use or uses as a medicinal cure. This paper describes in some detail this fascinating Iroquoian remedial or curing substance, the possible routes of exchange and the mechanisms by which it was distributed to Indian peoples throughout Ontario.

Historical Background

The Society of Jesus on their return to New France in 1632 began an ambitious program of evangelization designed to bring European moral, religious and social order to many of the Indian nations who occupied the interior of New France. Authorized by the King of France and requested by the civil authorities of New France through the Company of One Hundred Associates, the Jesuits undertook to develop a mission to the Ouendat or Huron Indians located in what is now south central Ontario. By 1639, the Jesuits had established a permanent European community not associated with an already existing Huron village. Soon after, a church, hospital and hostel for visiting Indians were constructed and several missions opened to other Huron nations and their Algonkian allies.

In 1642 the Jesuits sent to the Huron country a young Jesuit *donné*, René Goupil, to serve as doctor in the newly created hospital. However, along the St. Lawrence River he and his French and Huron companions were captured by the Mohawks. Of the Frenchmen, Father Isaac Jogues was later ransomed by the Dutch, and the young *donné* Guillaume Couture was adopted into a Mohawk family. But Rene Goupil was not as fortunate and he was murdered by an irate Mohawk after Goupil made the sign of the cross in front of one of his children.

François Gendron volunteered to go to New France in order to replace his good friend René Goupil. Gendron, aged twenty-five, had been certified as a master-surgeon on January 14, 1643 at the maison Dieu d'Orléans. There he had been educated by the Society of Jesus. After serving under a master-surgeon for

three years he was made a companion surgeon in 1641. For the next two years he was required to work among the sick and the poor and to write an examination which he apparently passed successfully. During his educational years at Orléans he had befriended René Goupil, and when he learned of his friend's capture and presumed death in the late fall of 1642, Gendron offered his services to the Society of Jesus. Religious motives appear to have brought Gendron into the Huron country, for he made the journey on the condition "that he was not expecting any salary at all and that it was entirely for the service of God, that he face these dangers and difficulties" (Hunter 1983: doc. 80).

Gendron was the only Frenchman to arrive at the Huron mission in 1643. He appears to have adapted quickly to his new responsibilities both at Sainte-Marie and throughout the mission. From his own account Gendron travelled by canoe to the Sault de Sainte-Marie sometime in 1644 or 45, however this appears to be his only long distance journey other than his arrival and departure. Father Paul Ragueneau, the superior of the Huron mission from 1645 to 1650, described Gendron's seven years of service stating that "during this period he helped the French and the Natives with the great charity in all their sicknesses; he worked very fine cures on many of them" (Champault 1912:44).

During his stay among the French and Hurons of the upper country, Gendron wrote letters to his associates back in France describing the conditions of the country as well as his observations on the plants, animals, and customs of the many Indian groups with whom the Huron and the French were in constant contact. Extracts of five of Gendron's letters were later published in 1660 by Jean-Baptiste de Rocolles, an historiographer to Louis XIV. In one of these letters there is a description of the source and method of distribution of the Erie stone:

Almost due south of the Neutral Nation one discovers a great lake about 200 leagues around called Erié, which is formed by the discharge from La Mer Douce (Lake Huron). At its far end it plunges over a waterfall of terrifying height to a third lake called Ontarioé, but which we call Lac St. Louis. As the water rushes among the great boulders at the foot of the falls the spray forms a stone, or rather a petrified salt, yellowish in colour, which is very effective in the cures of sores, fistulas, and malignant ulcers. In this direful spot there dwell also certain savages who live off elk, harts, wild cows, and every kind of game that the rapids carry away and hurl down among the rocks. They catch them thus without chase (which is) more than enough for their own provision and for that of travellers, with whom they trade these Erian stones (called thus after the lake), who then carry them away and distribute them among the other tribes. (Revel 1965: 3-4)

The likelihood that Gendron personally visited the Neutral country and "discovered" the Erie stone is improbable. One must consider that there is no indication in any contemporary historical literature of any Frenchmen visiting the Neutral country after the visit of Fathers Jean de Brebeuf and Joseph-Marie Chaumonot in the winter of 1640-41. There is sufficient evidence to suggest that Gendron's source both for the Erie stone itself and the information surrounding its distribution was obtained through Native informants. Furthermore, because

Gendron was interested in Native cures and actually adopted them into his own repertoire of curing substances, this suggests that Gendron was innovative and experimental in his approach to curing disease. One may deduce that he was not impressed with the older methods of healing such as blood letting, leeching and lancing. Rather he was able to make use of Native curing substances to form the base for an ointment which proved successful in curing open sores, skin lesions and malignant ulcers. Thus the Erie stone in its natural form was pulverized and mixed with other ingredients to provide a salve for treating open wounds.

Source

Gendron's description indicates that Erie stone was obtained from the Niagara River. The stone described by Gendron is the mineral aragonite which is made up of calcium carbonate (CaCO_3) with inclusions of magnesium sulphate and calcium sulphate.

The mineral is formed on the rock walls of the Niagara gorge as a result of water seepage through the numerous layers of limestone bedrock. In Figure 1 the uppermost layer of the Niagara Escarpment is a dolostone. This is a sedimentary rock composed of calcium and magnesium carbonate ($\text{CaMg}(\text{CO}_3)_2$). Rainwater which is normally slightly acidic seeps through the dolostone dissolving some of the carbonate minerals, and changing them to their bicarbonate form. In this way they are water soluble and are picked up and carried by the water.

Below the dolostone layer is a shale layer known as the Rochester shales. The water seepage does not penetrate through this layer, so it flows horizontally along the layers of dolostone which outlet at the Niagara gorge and run down the side of the rock face. Because of evaporation of some of the water, calcium carbonate and the mineral aragonite are produced (Murphy 1982: personal communication). Contrary to the theory of many of the visitors to the gorge, it is not the spray from the falls that has created the mineral.

In some localities along the gorge the buildup of aragonite amounts only to a small film on the wall, but in other localities it builds up to four or five centimetres and appears as a frothy greyish looking stone. This is the material so carefully described by Francois Gendron (see Figures 2-4 for details of availability).

Distribution

The Erie stone seems to have been controlled by a group of people who occupied that particular area of the Niagara River. This was undoubtedly a group or lineage of one of the seven Nations which made up the Neutral Confederacy. The Neutrals occupied the territory for several hundred years and were eventually dispersed by the Five Nations Iroquois in 1651-52.

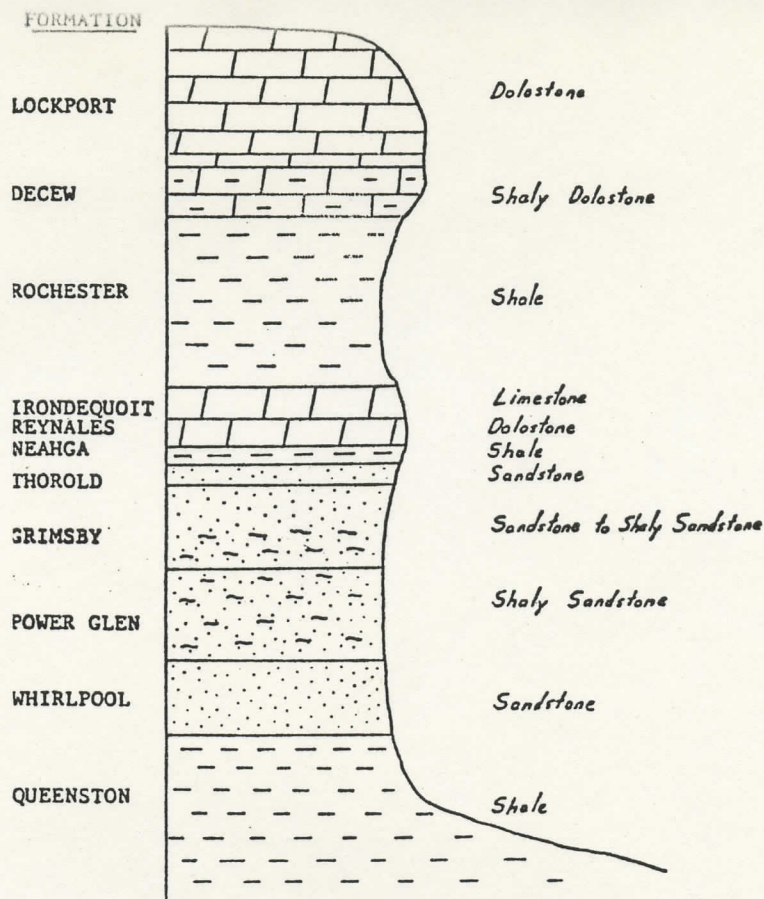


Figure 1. The rocks of the Niagara Escarpment -- all composed of sandstones, shales and limestones. Some of the limestones are impervious to water, so that the calcium carbonates, magnesium carbonates and salts run down the side of the rock face.

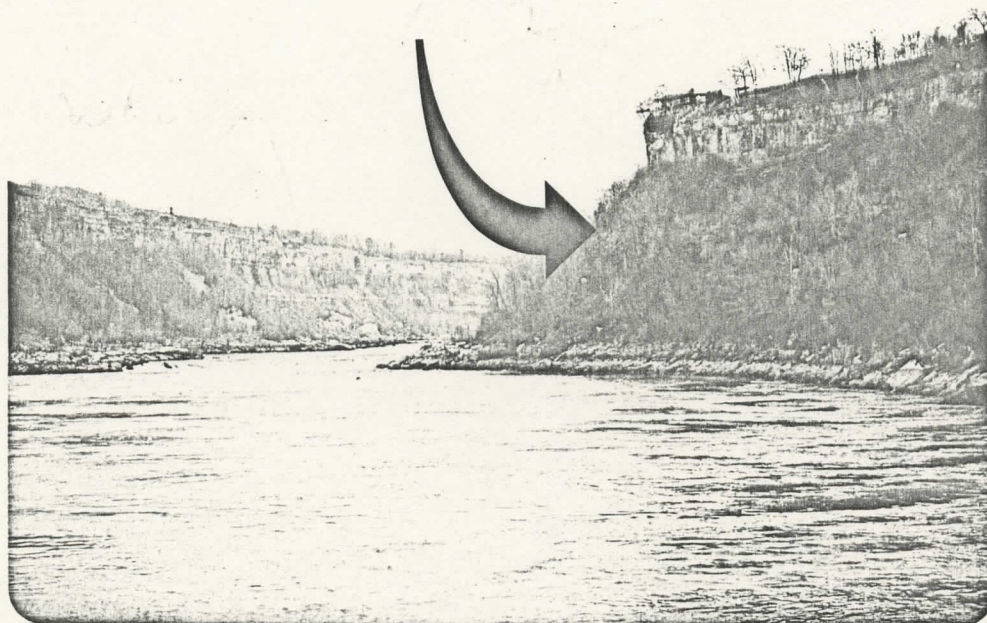


Figure 2. Photograph looking east toward the whirlpool. Arrow shows where the aragonite is found in abundance.



Figure 3. Shows the yellowish-whitish aragonite adhering to the rock face of the Niagara gorge.



Figure 4. Shows a student picking up aragonite below the rock face. Considerable quantities were obtained from this area in the fall of 1982.

Gendron notes that these people made excellent use of the numerous animals of all kinds that were caught by the current of the Niagara River and thrown over the falls. In fact the supply was so plentiful that there was no need to hunt. In addition to those resources, the inhabitants conducted a trade with travellers from many nations for the Erie stone. It is most likely that through this trading network Gendron learned about and obtained the Erie stone as a medicinal curing agent. As a doctor to the French and Hurons, he must have learned a great number of Indian cures. Unfortunately, only the Erie stone was described and so it stands alone as the only example of such trade.

Curative Value

The current therapeutic use of aragonite as outlined in contemporary medicinal journals indicates that calcium and magnesium were extremely useful in treating osteoporosis, leg cramps in pregnancy, improvement in breast milk, preventing premature birth, and the treatment of ulcers. An increase in calcium and magnesium in the diet may have been recognized by the Indians as a means of improving health and perhaps even the health of pregnant women. Bone does replace itself, and through the aging process and during pregnancy calcium requirements for the human body increase dramatically. An increase in dietary consumption of calcium would naturally be beneficial to any individual, while increased consumption of calcium and magnesium by pregnant women would be an effective response to mineral deficiencies.

It is possible that the young Christian woman from Ossossane who was five months pregnant and who died at Sainte-Marie was given aragonite as a medication during her pregnancy and illness, but this is not mentioned in the Relations. It states only that "her patience was heroic throughout her illness, which was a long one and was accompanied by excessive pain" (JR 26: 207-209). Nevertheless, it is an interesting reference because the woman did die in spite of what appears to be considerable effort to save her on the part of the Jesuits. The use of Erie stone to cure this woman must remain conjectural; however, if it was used, it may have impressed the Jesuits and workmen who in turn may have passed along the information to Gendron when he arrived at Sainte-Marie a year later. Otherwise, Gendron could have learned about Erie stone directly from the Huron through a member of a curing society or perhaps a shaman.

Discussion

Erie stone provides evidence of a Native trading network in curing medicinal substances. Such a network clearly operated among the Ontario Iroquoian peoples and may well have been in existence for several hundred years. The Neutral Confederacy, through one of their seven nations - the Niagagarega, appear to have controlled access by foreign traders to the Erie stone. This material could hardly be considered a luxury item as intimated by Bruce Trigger's observation that "almost all of the goods imported from the south were luxury items" (Trigger 1976:62). Such trade for medicinal requirements may have been of more social importance to the Hurons than the acquisition of luxury goods. It likely represents a reciprocal trading relationship between the Huron and Neutral, but precisely what the Huron traded to the Neutral is unknown. To take it a step further, it may be that such trade was carried out exclusively among members of curing societies or

shamans who specialized in treating certain illnesses. Acquisition of the curing substance could have been delegated to these people, rather than to the general family or lineage trading connections that controlled other commodities traded between designated nations and confederacies.

Unfortunately it is impossible to ascertain precisely how the Huron used the Erie stone for their curing and healing practices. As noted, it may have been used internally as a dietary supplement and it could have been used in a manner similar to what Gendron developed, that is as an ointment. Regardless of its method of use, we know that it was a medicine and that it was used by the French for curing skin lesions or sores, fistulas and malignant ulcers. It is the only exotic remedial or curing substance acquired by the Huron that is described in the historical literature. As such, it offers a fascinating glimpse of the curing substances used by the Ontario Iroquoian peoples in 17th century Ontario.

Acknowledgements

I would like to thank a number of people who helped make this paper possible. Sharon Armstrong, George Huber, Bert Murphy and Peter Peach provided me with details on the dripstone or Erie stone. Monique Desjardins patiently typed the manuscript through several drafts. Lastly, any mistakes or errors are mine.

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THE CULTURE HISTORY OF LONG POINT: AN INTERIM REPORT

William A. Fox

The first documented archaeological survey on Long Point was conducted by a crew of four supervised by David Stothers in 1972 (Stothers, 1972). Long Point Provincial Park was investigated between June 23 and 28, as part of the Ministry of Natural Resources provincial park archaeological inventory program. Despite intensive testing -- "approximately 600 1 foot square test cuts....in what was considered to be strategic areas," "Absolutely nothing indicating prehistoric aboriginal use of Long Point was either found or learned from informants;" leading Stothers (1972) to suggest that "Long Point probably did not exist as an entity until recent times (1500-1700 A.D.)," and conclude that further survey work on the Long Point Peninsula was not warranted as "nothing will be found" (Stothers, 1972:3).

On July 13, 1982 Dr. Michael Spence and the writer visited a locality near the tip of Long Point in the company of Cpls. Varden and Gaal of the Norfolk O.P.P. detachment. Boaters in July of 1981 had reported the discovery of a human cranium on a sand beach near Anderson's Pond. The findspot was investigated by the police in August of 1981 and the Ministry office in London eventually received the recovered remains in October, at the direction of Chief Wellington Staats of the Six Nations.

The 1982 visit to a rapidly eroding shoreline dune encountered one and, in places, two rich cultural strata containing early Late Woodland ceramics, notched pebble net-sinkers, fire-cracked rock and abundant fish bone. No human bone was in evidence on the beach or in the bank face, however a survey of the lake shallows produced several human long bone fragments. Two representative bank profiles were recorded through graphs and photographs, a tape and compass map was drawn and a representative artifact collection was acquired during the brief but memorable visit. As Mike will readily attest, the trip was of more than academic interest to him, considering the ticks, deer flies, a walk through a swamp and the near demolition of our boat as we "skimmed across" some enormous waves.

The human remains were turned over subsequently to Dr. El Molto for osteological analysis. His study indicated that 9 individuals (7 adult, 1 adolescent, 1 child) were represented and, while the sample was too small for a definitive identification, the discrete morphological attributes of these people were consistent with an Iroquoian population of the period from c. 800-900 A.D. Evidence derived from the police report and the bones themselves indicated that the burials had been of an articulated, as opposed to bundle form.

Ceramics from the Varden site (AdHa-1) seemed to date to the c.700 - 1000 A.D. period and did not appear to be "classic" Princess Point or early Glen Meyer (Fox, 1982b). Some rim decorative motifs appeared more similar to Young Tradition wares recovered from sites to the west, such as the Dymock villages (Fox, 1982a). This was not suprising, as Young-like ceramics had been recovered from the Boyd Lakefront site (AdHc-1) overlooking the Long Point marsh in 1980 (Fox, 1982b and 1983) (see Figure 3).

Faunal remains were well-preserved and abundant, so that a collection of 237

elements was recovered easily. These have been identified by Prevec (1983) as 70 percent fish. Amazingly, over 97 percent of the latter are burbot bones, a fish not common to archaeological assemblages due to its usual deep water habitat. Other fish identified are largemouth bass, yellow walleye, and northern pike. Avian remains are next in order of abundance, including primarily hooded merganser, but also duck (*Anatidae* sp.), horned grebe, and grouse. Reptiles include blanding's turtle, snapping turtle, painted turtle and garter snake, while the seven mammal elements represent white-tailed deer, red fox, raccoon, muskrat and meadow vole.

Due to the rapidly eroding condition of the Varden site, Mr. John MacDonald was approached to undertake a salvage excavation during the summer of 1983. John, an M.A. student at McMaster University, received an Ontario Heritage Foundation grant and was able to accomplish the work over a 10 week period from late May to early August. Two hundred and thirteen square meters were excavated (50-60 percent of the extant site) and a vast amount of data recovered. This was fortunate, as the eroding bank had receded a full meter between the July, 1982 visit and the writer's July 12, 1983 trip to the project with Dr. E. Molto to investigate a burial.

John's excavations encountered complex stratigraphy, including four cultural horizons (MacDonald, n.d.). There are ceramic mends between strata 1 and 2, and 2 and 3, while the basal stratum (4) is well separated from the upper components. Eight carbon samples have been submitted to the Physics Department at McMaster University for accelerator C^{14} dating. Preliminary ceramic analysis suggests the presence of both Glen Meyer and Princess Point occupations on the Varden site (J. MacDonald, pers. comm.).

As expected, the Varden salvage project produced a substantial faunal assemblage -- over 300,000 bones (primarily fish) according to an estimate by Dr. Cumbaa! Dr. Stephen Cumbaa of the Zooarchaeological Identification Centre, National Museum of Natural Sciences in Ottawa who is undertaking the faunal analysis states "I have never seen such a large quantity of well-preserved bone, particularly fish bone, from a Canadian archaeological site." (J. MacDonald, pers. comm.). John's recovery technique involved 1/4 inch screening, supplemented by 53 flotation samples from 35 features. Consistent with the 1982 sample, burbot predominate, however, bowfin, sturgeon, catfish, pumpkin seed, rock bass, yellow perch and walleye are also represented. Muskrat, voles, mice, ducks, various turtles and a hognose snake have also been identified within the massive assemblage.

Preliminary archaeobotanical analysis of the wood charcoal indicates the presence of both conifers and hardwoods -- beech/sycamore, oak, elm, poplar/willow, maple, ash, alder, birch (?), hop hornbeam (?) and *Juglans* sp. (?). Carbonized seeds include species of *Portulaca*, *Chenopodium* (goosefoot?), *Rubus* (raspberry), *Rhus* (sumac), *Polygonum*, *Fragaria* (strawberry) and *Sambucus* (elderberry) (J. MacDonald, pers. comm.).

Preliminary data from the Varden project illustrated the importance of this site to our understanding of early Iroquoian activities on the point. A Long Point archaeological survey was necessary now in order to place Varden within a cultural context. Limited survey in 1983, plus occasional artifact discoveries by Canadian Wildlife Service staff indicated that more prehistoric sites awaited discovery, but basic questions still remained -- over what length of time was Long Point occupied and what caused man to return over the centuries to this 32 kilometer long sand spit in Lake Erie? With these and other questions in mind, a survey project was organized for the summer of 1984.

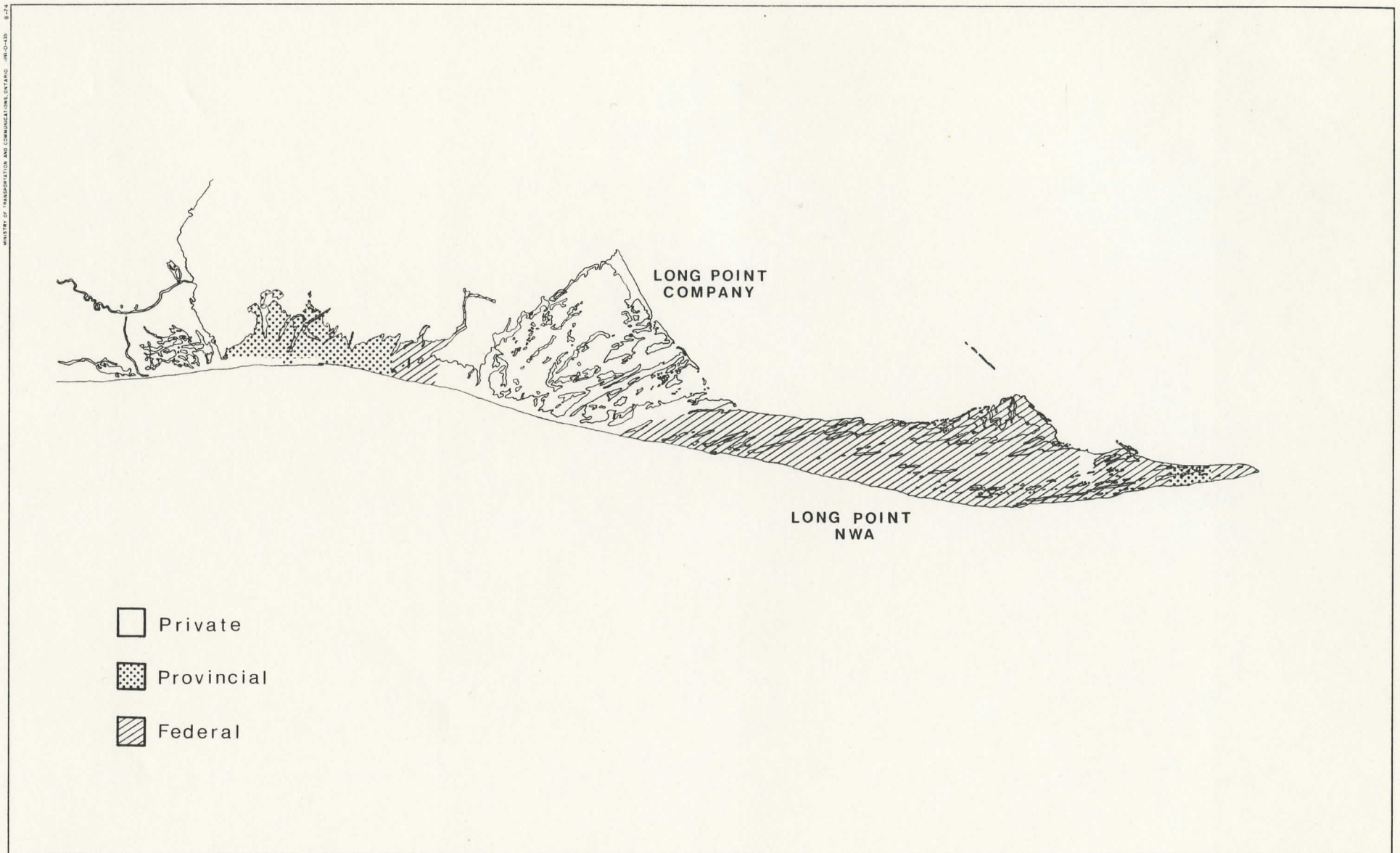


Figure 1: Land Ownership

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The Survey

Since the inception of the Long Point Company in 1866 (Barrett 1979), access to the point by the general public has been limited; much to the benefit of Long Point's natural resources. Access is still limited today, however resource management responsibilities are now shared by a variety of private, provincial and federal agencies (see Figure 1). Written authorization had to be obtained from both the Long Point Company and Canadian Wildlife Service in order to conduct the 1984 survey and both groups kindly supported the project.

Thus a small flotilla landed at Squires Ridge on August 31. An initial crew of six swelled to eight as Ian Kenyon and Paul Lennox arrived five days later. The base of operations for the 10 day survey was a C.W.S. cabin at Squires Ridge. Several days were also spent by a segment of the crew at the Gravelly Bay cabin to the east. Transportation was generally by canoe and on foot, however Mr. Dave Stone graciously volunteered his extensive knowledge of the point and the use of his inboard craft over several days.

The survey strategy was generated by a number of considerations. Foremost was the fact that due to a rise in Lake Erie levels over a decade before, severe shoreline erosion had occurred for the first time in centuries along the more protected north shoreline of the point. Varden was already a casualty, but how many more were there? Were there prehistoric sites in the interior? Long Point's form represents a complex history of deposition and erosion, but it has been extending eastward over the last several millenia. Would we discover an evident temporal gradient back through time in site distribution from east to west?

A considerable area of shoreline and interior was investigated, as illustrated in Figure 2. Shoreline survey techniques involved surface inspection of lake shallows, beaches and eroding dune faces, supplemented by shovel test pitting of backshore dunes. Long Point is comprised of a series of northeast-southwest trending sand ridges covered by an open forest of primarily deciduous species, which are separated by wet meadows, swamps and ponds. Shovel test-pitting, at 5-10 meter intervals, supplemented by surface survey of exposed soil areas was accomplished along the Courtright, Squires, and several other ridges (see Figure 2).

Survey Results

With only ten days available for survey, the project strategy had to be constantly reviewed and refined. A balance had to be struck between allotting adequate manpower to initially unproductive zones in order to test the validity of our preliminary observations and intensifying survey in evidently productive areas. Many hours were spent in walking and shovel test-pitting interior ridges with negative results (see Figure 3). Only one prehistoric site was discovered away from presently existing open water -- the Netsinker Cache (AdHa-3) located several years before by Jeff Robinson of the C.W.S. Survey along the south shore produced numerous notched pebble netsinkers in recent beach deposits, but no intact sites.

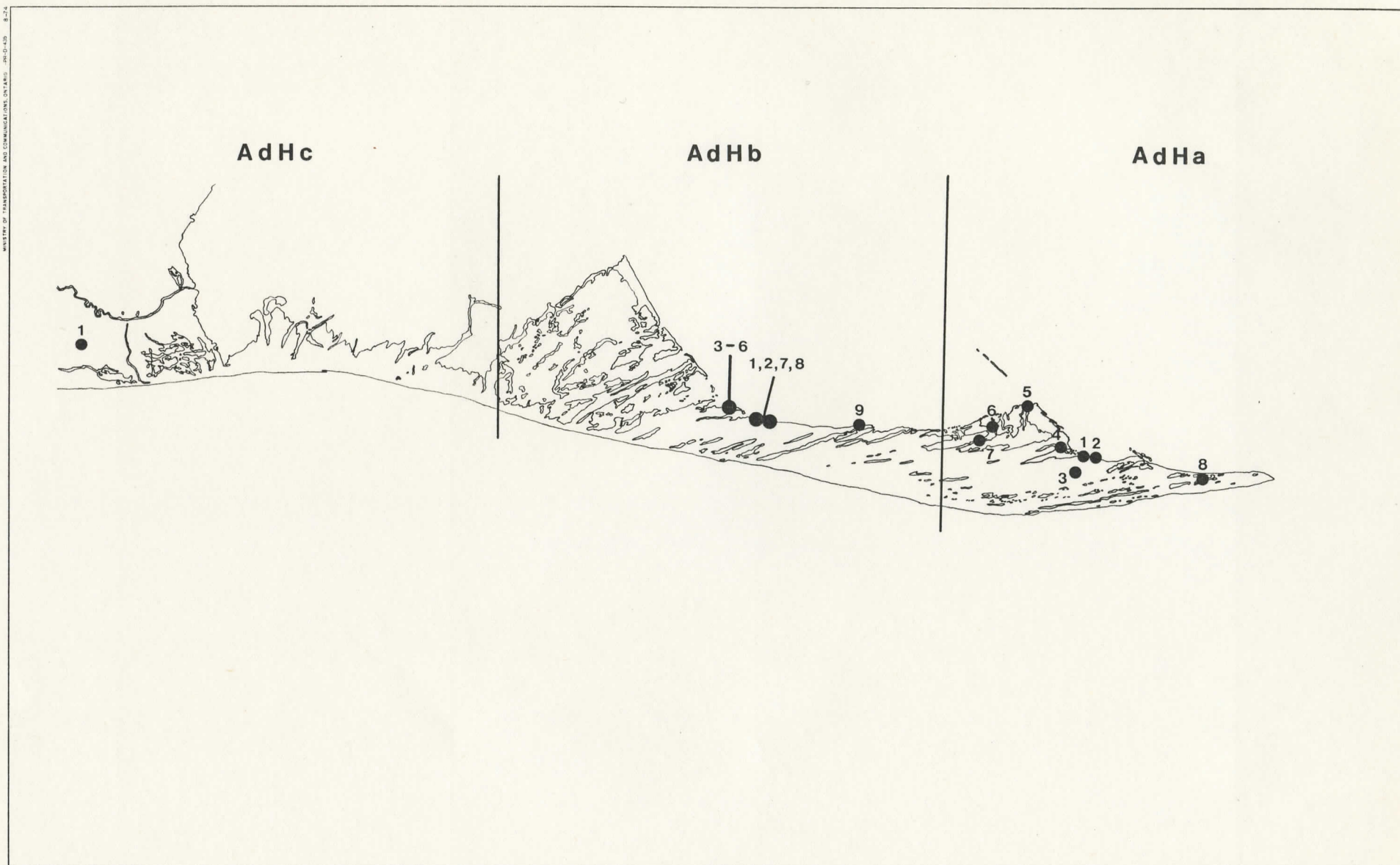


Figure 3: Registered Sites

All substantial prehistoric components were discovered along the present north shoreline, as illustrated in Figure 3. Ten previously unknown prehistoric and two historic sites were registered, while three prehistoric and one historic components which had been located by Long Point residents were added to the Archaeological Survey of Ontario files. Five additional localities produced artifacts in such a water eroded condition and context or of such minimal diagnostic value that they were not registered with Borden numbers for the present. Table 1 summarizes extant Long Point archaeological information. Princess Point Complex (c.600-800 A.D.) components are most widely distributed, while the earlier Middle Woodland occupation (c.300 B.C.-300 A.D.) is limited to only five sites, two of which are questionable (AdHb-1 and 4). Many cultural identifications are tentative (but probable) due to limited and/or severely water rolled ceramic samples. In fact, fifteen of the seventeen registered sites on Long Point have been partially or totally disturbed by lakeshore erosion.

Site Name		Middle Woodland	Princess Point	Glen Meyer	Middleport	Late Prehistoric Neutral	Unidentified Prehistoric	19th Century European
Robinson	AdHb-1	x?	x					x
Water Nymph	AdHb-2			x	x	x		
Daisy	AdHb-3	x	x	x	x	x		x
	AdHb-4	x?	x	x?	x?			
	AdHb-5	x	x					x
Lipsit	AdHb-6	x	x			x		
	AdHb-7		x?					
Brydon	AdHb-8							x
Cedar Creek	AdHb-9							x
Varden	AdHa-1		x	x				
Jack Lange	AdHa-2		x	x				
Netsinker Cache	AdHa-3						x	
Anderson Pond Burial	AdHa-4						x	
Bluff Point	AdHa-5		x?					x
Little Creek Ridges	AdHa-6		x		x	x		x
Upper Bluff Pond	AdHa-7					x?		x
Long Point Lighthouse	AdHa-8							x
Cultural Component Totals		5	10	5	4	5	2	9

Table 1: Long Point Archaeological Sites.

The earliest documented occupation of Long Point is represented by Middle Woodland artifacts recovered from three former camps on the north shore of Courtright Ridge -- the Daisy and Lipsit sites and AdHb-5 (see Figure 3 and Table 1). Coarse dentate (often rocker) stamped ceramics characteristic of the Saugeen culture predominate (see Figure 4:1); however, the Daisy site produced a vertical corded exterior rim sherd and corded body sherds, as did nearby AdHb-5, which may be indicative of a Western Basin Middle Woodland occupation. Due to their friable and soft nature, Middle Woodland ceramics have been severely impacted by water erosion of sites. Both the Daisy and Lipsit sites produced notched Saugeen style chert bifaces (see Figure 5:1). Little can be said at present concerning the non-diagnostic remainder of their lithic assemblage or subsistence activities due to the water eroded, multi-component nature of these sites.

A substantial terminal Middle Woodland Princess Point Complex (c. 600-800 A.D.) occupation of the point is represented by components on ten registered campsites and possibly an additional two localities. Typical cord-wrapped stick impressed, exterior punctate rims are common (see Figure 4: 2,3), as are "cord on cord" geometric design decorated neck sherds and corded or fabric impressed body sherds. Ceramic pipe fragments which appear to relate to this early Iroquoian period were recovered from Robinson and AdHb-4. Finally, some refined dentate stamped and cord-wrapped stick impressed rim sherds from the Lipsit site may represent the as yet poorly defined late Middle Woodland occupation immediately preceding Princess Point.

Lithic tools include characteristic triangular bifaces -- "Levanna points" of Onondaga chert (see Figure 5:2). As with all Late Woodland peoples on the point, locally available Onondaga and Selkirk chert pebbles were utilized for tool production. However, evidence from the aceramic Bluff Point site suggests that Princess Point peoples also worked bedrock quarry derived Onondaga chert. The latter site may well represent a deer kill and butchering station as a large "Levanna point," an ovate biface knife, a portion of a large biface blank and numerous large biface thinning flakes were found. Additional tool forms which likely pertain to Princess Point occupations include a biface "strike-a-light" from the Little Creek Ridges site, a T-base drill from the Daisy site and some of the triangular biface blades and notched limestone pebble netsinkers recovered from various Long Point sites.

Deer and turtle bones are often associated with submerged, eroded prehistoric deposits on the point and may pertain to any component represented on a particular site. Obviously, only intact cultural deposits such as those encountered at the Varden camp can provide any clear picture of Native subsistence activities on Long Point during specific periods of prehistory.

The succeeding early Late Woodland Glen Meyer (c. 800-1250 A.D.) occupation is less extensive; being represented on only five sites (see Table 1), one of which is tentative. In addition to diagnostic ceramic rims, a ground slate bilateral draw knife from AdHb-4 may be a Glen Meyer tool. The upper strata of the Varden site hold greatest promise for documenting Native activities during this period, and it is not surprising that net procurement of fish appears to have been the primary objective of the site inhabitants.

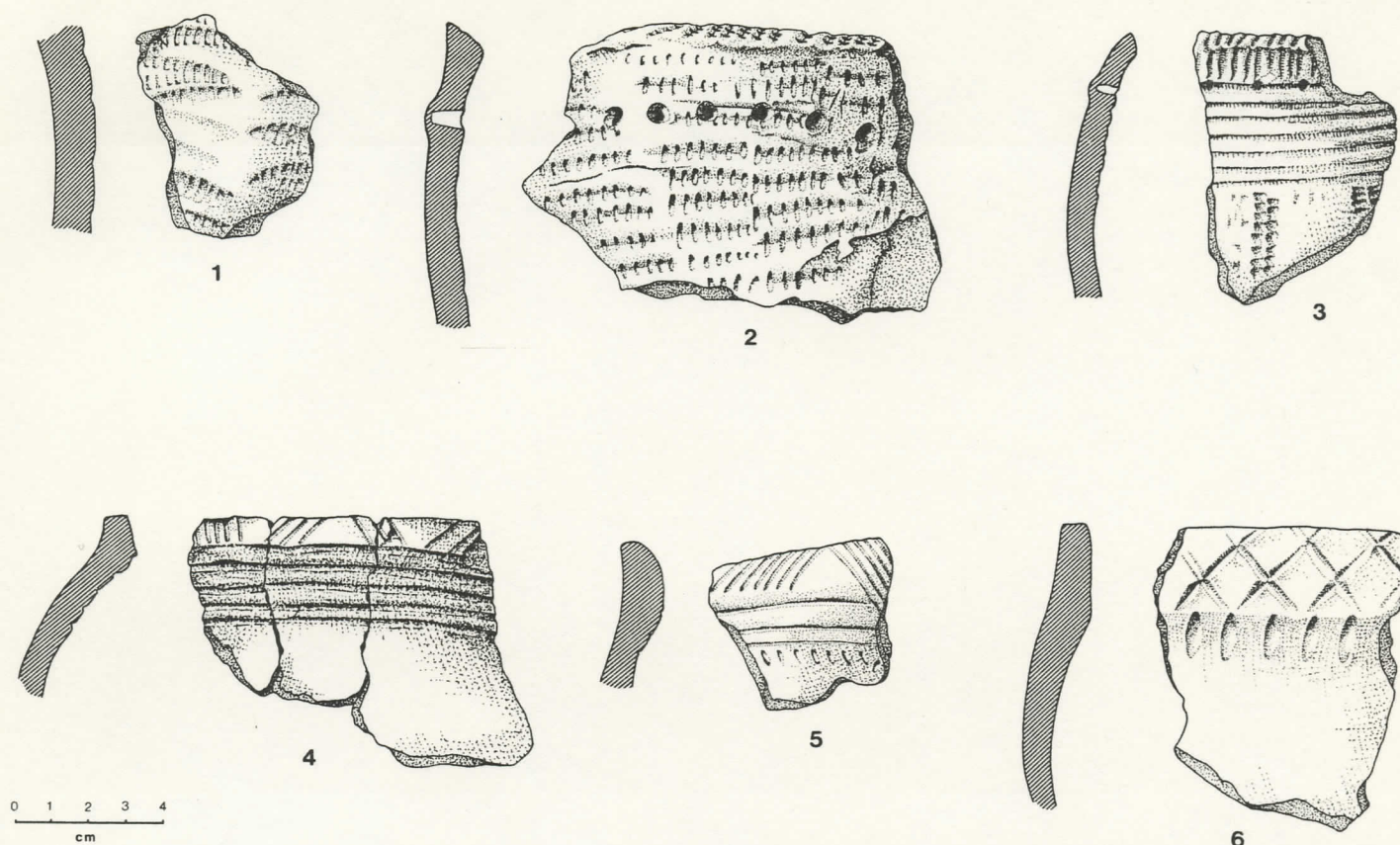


Figure 4: Long Point Prehistoric Ceramics. 1. Rocker dentate Middle Woodland body sherd (AdHb-3) 2. Princess Point rim sherd (AdHb-3) 3. Princess Point rim sherd (AdHb-6) 4. Middleport rim sherd (AdHb-2) 5. Middleport rim sherd (AdHb-2) 6. Late Prehistoric Neutral rim sherd (AdHb-2)

Similar subsistence activities undoubtedly attracted later Iroquoian peoples to Long Point, although our survey data are only suggestive due to the disturbed context of most artifact recoveries. Ceramics indicative of Middleport (c. 1250-1400 A.D.) and Late Prehistoric Neutral (c. 1400-1550 A.D.) occupations have been identified on four and five sites, respectively (see Table 1, Figure 4: 4-6). Diagnostic lithic tools include triangular and side-notched (Nanticoke style) biface arrowpoints (see Figure 5: 3,4). A ground greywacke spall adze from the Water Nymph site relates to this late period of occupation, as probably does the specimen from the Daisy site illustrated in Figure 5:5.

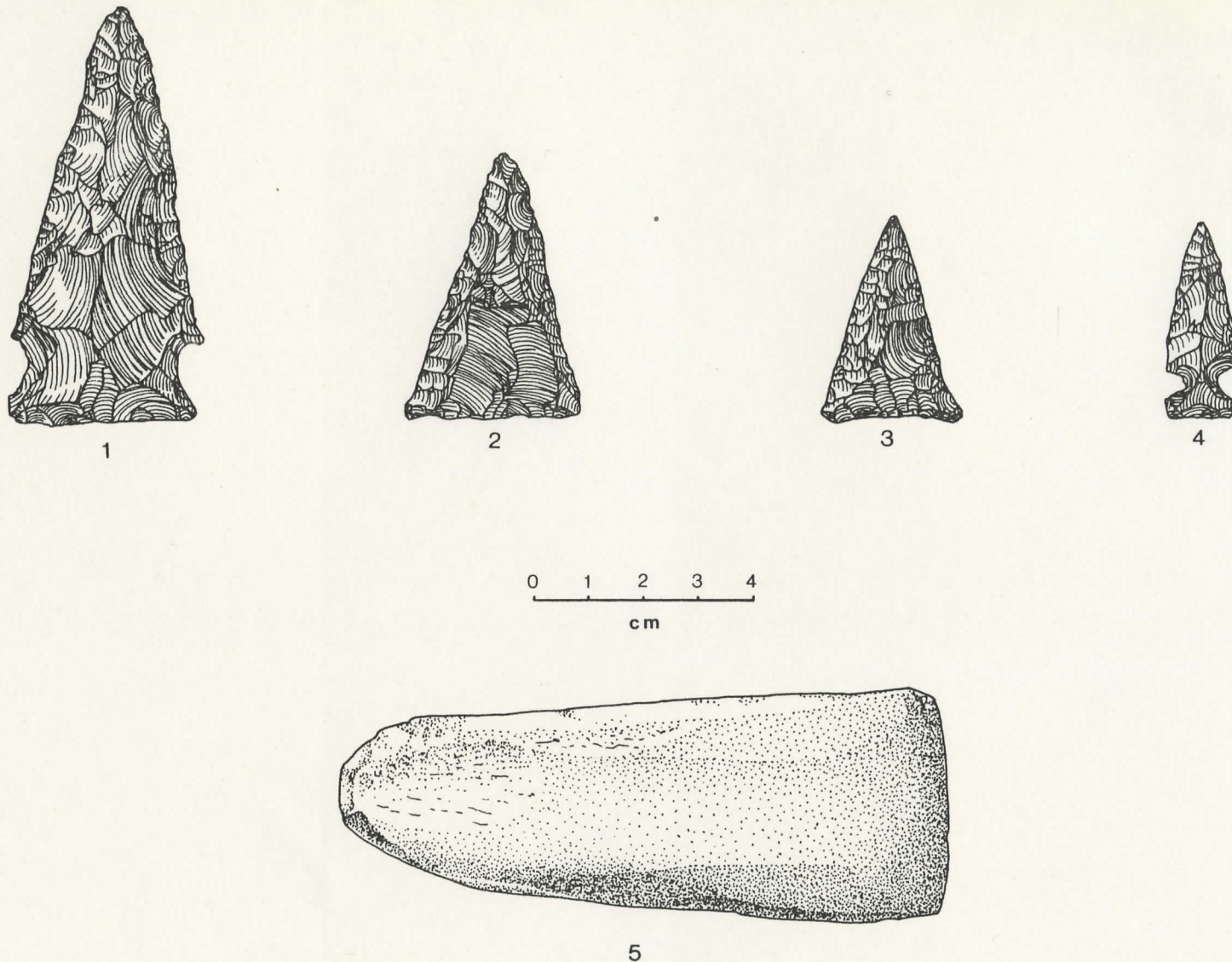


Figure 5: Long Point Prehistoric Lithics (Daisy Site)

1. Saugeen point - Onondaga chert
2. Levanna point - Onondaga chert
3. Middleport triangular point - Onondaga chert
4. Nanticoke notched point - Selkirk chert
5. Chlorite schist adze

The only prehistoric component discovered by the 1984 survey which had not been affected by recent high water levels was a small midden on Upper Bluff Pond (AdHa-7). It was located through shovel test-pitting and was overlain to a certain extent by mid-nineteenth century European debris. The plain smoothed body sherds suggest a Late Prehistoric Neutral provenience or Middleport at the earliest. This small, apparently single prehistoric component deposit will provide important information through future excavations on later prehistoric Iroquoian activities. A limited lithic assemblage suggests that local Onondaga chert pebble sources continued to be utilized, while the well preserved faunal osteological sample includes remains of fish, turtle and deer.

Two archaeological sites were evidently prehistoric Native, but can be assigned no more specific cultural provenience at this time. Future pebble netsinker attribute studies may help to identify the former owner of the Netsinker Cache (AdHa-3), while ongoing osteological analysis will provide some idea of Anderson Pond child burial (AdHa-4) cultural affiliation. Dune erosion resulting from high water levels had exposed and partially destroyed the grave of a child buried in a flexed, articulated mode -- head to the south and on their right side.

No evidence of an historic Native occupation on Long Point has been discovered as yet. Following an hiatus in the record of roughly three to four hundred years, mid to late nineteenth century European activities are evidenced on 9 sites (see Table 1 and Figure 3). Much archival research remains to be accomplished and larger samples from primary context are required in order to interpret the function of most. Sites such as Brydon (AdHb-8), which contain ceramics of the 1860's, may represent camps related to the initial logging of the point (Barrett 1979: 84). Bluff Point (AdHa-5) produced ceramics dating from the 1850's onward and the earliest material probably derives from Harry Clark's occupation. He owned 100 acres there and established a vineyard and peach orchard (Barrett 1979: 97). An iron trap component associated with mid-nineteenth century ceramics from the Little Creek Ridges (AdHa-6) site reflects the well documented fur trapping activities so prevalent on Long Point at that time (Barrett 1979: 149).

Conclusions

The 1984 survey was admittedly limited and thus, the resulting picture of man's past activities must be viewed as tentative. Nevertheless, an interesting pattern has emerged. It is not surprising that all evidence indicates prehistoric Native occupation of the point revolved around a warm season harvest of the rich aquatic resources of Long Point Bay and perhaps also the shallows of Lake Erie to the south. An unexpected discovery was that the archaeological record only extended back to c. 300 B.C. All the earliest components are situated in the Courtright/Squires ridge area and no further east. This is in contrast to the subsequent occupation from Princess Point (c. 600-800 A.D.) times onward. Also, prehistoric campsites cluster in two areas -- just east of the pond system protected by Ryersons Island in the west and around the periphery of the ponds sheltered by Clarks Bluff to the east.

These prehistoric settlement patterns may reflect only the limitations of the survey, but this is deemed unlikely. They probably indicate the abundant biota supported by these two similar environmental niches. Such areas would support large fish, turtle, aquatic mammal and, seasonally, water fowl populations. They would also provide a wide variety of plant foods, perhaps including wild rice.

Why are there no early Middle Woodland sites on the Bluff Ponds or Anderson Pond? Perhaps they have simply gone undetected or perhaps it is because this rich pond environment did not exist 2000 years ago. Based on an hypothesized point growth rate of roughly 7 meters per year prior to 1945 (McKeating 1983 : 44), the latter is a distinct possibility.

There is a well-documented, substantial Early Woodland occupation along the north shore of the extensive marshlands at the west end of Long Point (Spence et al 1978 and Fox 1983). Why is there no evidence for this or an earlier Archaic period occupation on the point? Again, inadequate sampling could be to blame, however, Coakley's (1984) report on the late quaternary history of Long Point describes the dynamic nature of the point over the last eight millenia.

From at least 12,500 until approximately 10,000 years ago -- the PaleoIndian period -- a land bridge existed across Lake Erie in the vicinity of Long Point and at an elevation well below present lake levels. This has been termed the **Isthmus stage** (Coakley 1984 : 32). The isthmus was breached and a point came into being south of the present Long Point. It dwindled in size over the millenia and essentially disappeared four to five thousand years ago, due to the rising Lake levels caused by the discharge of pro-glacial Lake Nipissing waters in the Huron basin into the Erie basin (Coakley 1984 : 34).

This reconstruction of Long Point's development explains the lack of PaleoIndian to early Late Archaic sites on the present point. What happened next is still open to conjecture. Coakley (1984) suggests that following c. 2000 B.C., lake levels declined rapidly to below present levels and the modern point began to evolve. Long Point began migrating north and east as result of wind and wave action. Its relatively rapid metamorphosis could explain the lack of Late Archaic to Early Woodland sites -- either the biotic richness of the environment was inadequate to entice these peoples onto the lake or their camps lie under the water and sediments of Lake Erie, destroyed or hidden by the natural forces which have shaped the point.

Another possible scenario derives from some sediment radiocarbon dates obtained from deltaic deposits roughly five meters above present lake level and situated along the north shore of Long Point Bay (Barnett in press). These suggest that the Nipissing peak continued longer than previously believed, maintained by a moraine sill at Fort Erie. Once the sill was breached, there could have been a relatively rapid drop in level and a date of c. 400 B.C. is consistent with the Barnett's findings (P. Barnett pers. comm.).

Perhaps our preliminary settlement pattern does reflect reality, and the point only became attractive for habitation 2,000 years ago in Middle Woodland times. In cooperation with Dr. Coakley, Dr. McAndrews and the Canadian Wildlife Service, plans are underway to obtain a series of sediment cores from strategic ponds along the point for radio-carbon dating -- we may have an answer soon....

Acknowledgements

The writer wishes to begin by acknowledging the diligent and, at times, daring work of the field crew who accomplished so much in ten days. Thank you John MacDonald, Ann Brydon, Ian Kenyon, Malcolm Horne, Peter Reid, Paul Lennox and Janie. No survey would have been possible without the tremendous assistance of the

Canadian Wildlife Service and their staff -- particularly Jeff Robinson and Paul Madore. The Long Point Company and keeper Bill Lipsit provided access to the Courtright Ridge and Ryersons and Snow Islands. Bill also extended his hospitality to crew members, as well as providing some emergency logistic support. Dave Stone kindly volunteered his time and boat to the project and even donated a collection of prehistoric artifacts gathered on the point over the years.

Transportation to the point in previous years was made available by both the Canadian Wildlife Service and the Norfolk detachment of the Ontario Provincial Police. Osteological expertise during field work and subsequently in the lab was provided by Drs. El Molto and Mike Spence. Faunal analysis of the 1982 collection was accomplished by Rosemary Prevec. John MacDonald generously shared preliminary data from his Varden project. Peter Barnett of the Ontario Geological Survey and Dr. J. Coakley of the Canada Centre for Inland Waters kindly provided unpublished data and research reports concerning the geomorphological history of Long Point. Janie Fox drew Figures 4 and 5, and Neal Ferris word processed the manuscript. Thank you all. Finally, any errors in reporting or interpretation are the sole responsibility of the writer.

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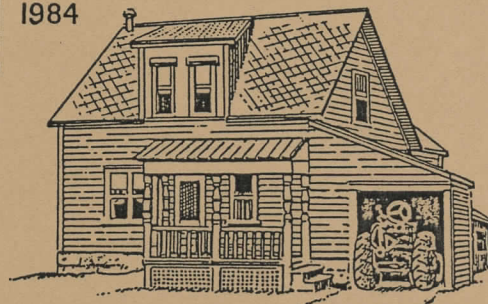
NINETEENTH CENTURY NOTES

THE LOG HOUSE THROUGH TIME

Thomas Kenyon

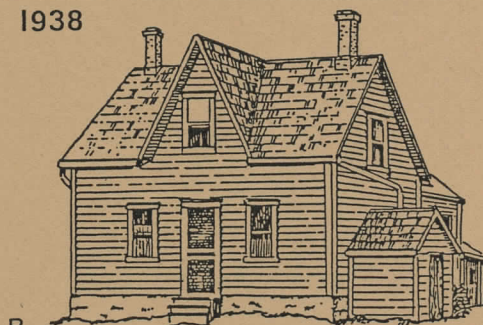
Contrary to popular opinion the 17th C. English colonists in America were not familiar with horizontal log construction techniques, bringing with them the frame and half timbered style of building tradition from their homeland. Historians generally agree that the log cabin was introduced to North America in the 17th C. by the Swedes, who settled in the Delaware valley. From them it spread to the Pennsylvania Germans, Western New York and thence to Canada through the United Empire Loyalists. Crudely built from rough timbers, the log shanty was often the first home of the early settlers in Upper Canada. Later this might be replaced by a more substantial log house. Their base dimensions usually ranged from 16' by 16' to 20' by 30' with the most popular size being 16' by 20' (Rempel 1967). The walls were 8 to 12 logs high and put together without any regards for the doors or windows, which were cut in afterwards with an axe and a crosscut saw. The logs were fitted snugly at the corners with notched joints of varying types (Ill. D). When sawn lumber became available, log cabin building slowly gave way to frame construction. Not all settlers changed to frame or masonry houses; some remained in their log houses modifying them to suit the times and their needs. A good example of this the present home of Eugene Pridmore (A), located on the banks of the Grand River in Haldimand Co. Originally a log cabin built in the mid-19th C. (C), it was purchased by Mr. Pridmore in the 1930's, by which time it had already been renovated with a foundation, clap board siding, a dormer, and three attached smaller frame buildings (B). Since then Mr. Pridmore has made further changes including a verandah, a bigger dormer, a garage, more windows and a heating system converted into natural gas, obtained from a well on the property (A). A passerby today would be unlikely to recognize the log cabin origin of Mr. Pridmore's comfortable home. Not so fortunate as the Pridmore home are two abandoned modified log houses recorded in the late 1960's in Tuscarora Twp.: one (F) was covered by clap board siding, the other (E) had been resurfaced with stucco.

1984



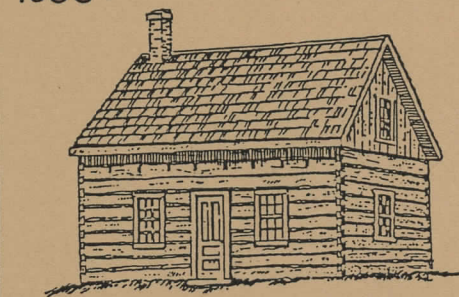
A

1938



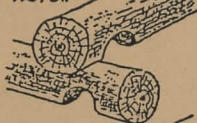
B

1800's

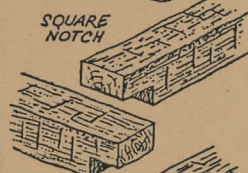


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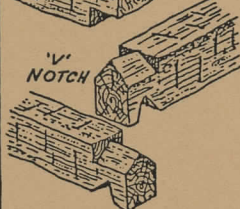
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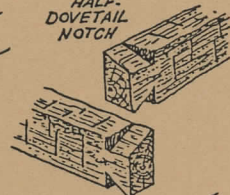


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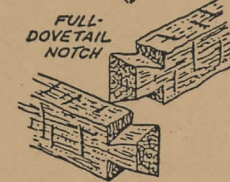


NOTCHING METHODS

HALF-DOVETAIL NOTCH

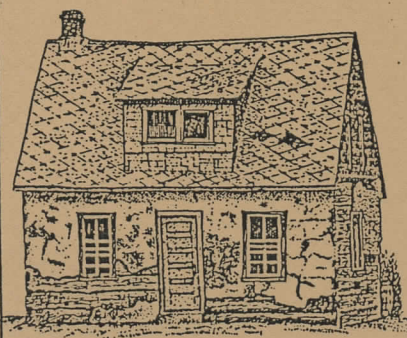


FULL-DOVETAIL NOTCH



D

E



F

